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EXAMINER	
EGAN, SCOTT T	
ART UNIT	**PAPER NUMBER**
2622	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	**Application No.** 10/680,418	**Applicant(s)** LEE ET AL.
	Examiner Scott Egan	**Art Unit** 2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 October 2003*.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-50* is/are pending in the application.
  4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-4,8,10-31,34-38 and 41* is/are rejected.
7)☒ Claim(s) *5-7,9,32,33,39,40 and 42-50* is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on *08 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.
  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  a)☒ All b)☐ Some * c)☐ None of:
    1.☒ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
  Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statements (IDS) submitted on August 24, 2005 and February 6, 2007 were considered by the examiner.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

4. The disclosure is objected to because of the following informalities: paragraph [0024], line 4, correspond is misspelled and should be corrected.

Appropriate correction is required.

Claim Objections

5. Claims 1 and 8 are objected to because of the following informalities: Consider claim 1, on line 4 “sectionshaving” should be two words. Consider claim 48, on line 2 “buttonsto” should be two words. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. **Claims 1, 4, 13, 16, 18, 20, and 21** are rejected under 35 U.S.C. 102(b) as being anticipated by Nakamura et al. (US 2002/0030749).

Consider **claim 1**, Nakamura et al. explicitly teach:

An image photographing apparatus (image capturing apparatus 21, figure 1), comprising:

a body, on which a tape cassette is removably mounted (image capturing apparatus 21 has a removable recording means 25 that is a cassette, paragraph [0062]);

a camera unit installed in the body and provided with a plurality of camera sections having pixel numbers and independently driven (image capturing devices D1 and D2, which are driven independently by driving circuit 42, paragraphs [0059] and [0064]);

a mode sensing unit to sense a photographic mode to correspond to at least one of the camera sections (CPU 48 produces control signals to drive D1 and D2, paragraphs [0064]);

a control unit to select a photographic mode according to a signal transferred from the mode sensing unit and to drive the camera unit to correspond to the selected photographic mode (CPU 48 produces control signals to drive D1 and D2 in accordance with the selecting means, paragraphs [0064] and [0065]); and

a display unit provided in the body to show an image photographed by the at least one camera section (display means 24).

Consider **claim 4**, Nakamura et al. explicitly teach:

The apparatus according to claim 1, wherein the camera sections comprise:

a first camera section (capturing device D1 is dedicated to still image recording, paragraph [0067], line 6) used as a digital still camera to photograph still images; and

a second camera section (capturing device D2 is dedicated to moving image recording, paragraph [0067], lines 11-12) used as a digital video camera to photograph images including moving images, wherein the second camera section has a pixel number lower than a pixel number of the first camera section (paragraph [0059], lines 10-13).

Consider **claim 13**, Nakamura et al. explicitly teach:

The apparatus according to claim 1, wherein the mode sensing unit comprises: a selector switch which turns ON one of the camera sections and turns OFF the other, and senses the photographic mode corresponding to the camera unit turned ON by the selector switch (paragraph [0065]).

Consider **claim 16**, Nakamura et al. explicitly teach:

The apparatus according to claim 4, wherein the first camera section comprises:

a first lens for a digital still camera (photographic lens 31);

a first CCD for the digital still camera (capturing device D1, paragraph [0058]), which converts at least one still image imaged by the first lens into electric signals; and

a first driver controlled by the control unit to drive the first CCD (driving circuit 42 is controlled by CPU 48, see figure 1).

Consider **claim 18**, Nakamura et al. explicitly teach:

The apparatus according to claim 1, wherein the camera unit comprises:

a flash unit to emit light when one of the camera sections photographs (paragraph [0065]).

Consider **claim 20**, Nakamura et al. explicitly teach:

The apparatus according to claim 4, wherein the camera unit comprises:

a flash unit to emit light in a direction that the first camera section photographs (paragraph [0065]).

Consider **claim 21**, Nakamura et al. explicitly teach:

The apparatus according to claim 1, further comprising:

a flash memory mount section provided in the body and having a flash memory removably installed to store data including the still images (paragraph [0062]).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

> invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. **Claims 1-4, 8, 10-15, 19, 23, and 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata et al. (US 7084919).

Consider **claim 1**, Shibata et al. explicitly teach:

An image photographing apparatus (portable terminal, figures 1-12), comprising:

a body (figures 1-12 show the body of the phone), on which a recording medium is removably mounted (storing unit 53, column 14, lines 43-47);

a camera unit installed in the body and provided with a plurality of camera sections having pixel numbers and independently driven (column 10, lines 4-10, axial unit 30 and flip unit 20);

a mode sensing unit to sense a photographic mode to correspond to at least one of the camera sections (axial unit state sensor 55, column 13, lines 22-26);

a control unit to select a photographic mode according to a signal transferred from the mode sensing unit and to drive the camera unit to correspond to the selected photographic mode (control unit 51, figure 13); and a display unit provided in the body to show an image photographed by the at least one camera section (panel monitor 21, column 11 lines 4-11).

However, Shibata et al. do not explicitly teach the use of a cassette.

Official Notice is taken that cassette tapes have been widely used to store still and video image data. Since a cassette tape is an obvious variant of a recording medium taught in Shibata et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a cassette tape to record still and video data as desired by the user.

Consider **claim 2**, Shibata et al. further teach:

The apparatus according to claim 1, wherein the camera unit is installed in the body to be rotatable in relation to the body (the flip unit 20 is rotatable as seen in figure 1), and the photographic mode sensed by the mode sensing unit is determined according to a rotated angle of the camera unit (column 13, lines 48-56).

Consider **claim 3**, Shibata et al. further teach:

The apparatus according to claim 2, wherein when the camera unit rotates, the mode sensing unit senses photographic modes corresponding to the camera sections in reference to an angle of 180° (column 13, lines 48-56, the first photographic lens 33 and the second photographic lens 23 are directed in the inverse direction).

Consider **claim 4**, Shibata et al. teach:

The apparatus according to claim 1, wherein the camera sections comprise:

a first camera section used as a digital still camera to photograph still images (photographic lens 23, which takes an image of the users face, column 11 lines 6-8); and

a second camera section used as a digital video camera to photograph images including moving images (photographic lens 33, column 12 lines 1-4). ~~wherein the second camera section has a pixel number lower than a pixel number of the first camera section~~.

However, Shibata et al. do not explicitly teach that the camera section has a pixel number lower than the pixel number of the first camera section.

Official Notice is taken that the concept and advantages of using a lower number of pixels for capturing video than still images is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to use less pixels for video capture in the terminal found in Shibata et al. in order to save memory in that video does not need to be captured in high resolution, whereas stills need more detail.

Consider **claim 8**, Shibata et al. further teach:

The apparatus according to claim 1, wherein the camera unit comprises:

a housing (main unit 10, axial unit 30 and flip unit 20) to receive the camera sections to be oppositely directed on a same line (figures 1 and 2 is interpreted to show the two sections on the same line, photographic lenses 23 and 33 inside flip unit 20 and axial unit 30 respectively); and

a hinge section to rotatably connect the housing to the body (axial unit 30, figure 1).

Consider **claim 10**, Shibata et al. teach:

The apparatus according to claim 8, further comprising:

a battery (power supply, column 13, line 34)

However, Shibata et al. do not explicitly teach that the battery is removably mounted.

Official Notice is taken that removably mounted batteries have been widely used to power imaging devices. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a removably mounted battery into the device found in Shibata et al. in order to provide the user with a the a convenient way to charge the or replace power source.

Consider **claim 11**, Shibata et al. further teach:

The apparatus according to claim 8, further comprising:

a flash memory mount section provided in the housing and having a flash memory to store still images (column 14, lines 43-47).

Consider **claim 12**, Shibata et al. further teach:

The apparatus according to claim 1, wherein the body comprises:

a microphone unit to receive external acoustic signals (microphone 18); and

a speaker unit to send out recorded sounds (speaker 24).

Consider **claim 13**, Shibata et al. further teach:

The apparatus according to claim 1, wherein the mode sensing unit comprises:

a selector switch which turns ON one of the camera sections and turns OFF the other, and senses the photographic mode corresponding to the camera unit turned ON by the selector switch (the axial unit 55 senses the angle and determines whether to power the camera or which section to power, column 13, lines 22-56).

Consider **claim 14**, Shibata et al. further teach:

The apparatus according to claim 13, wherein when the camera unit rotates in relation to the body, and the selector switch turns ON the camera unit located within the predetermined range of the rotated angle of the camera unit and turns OFF the remainder (the axial unit 55 senses the angle and determines whether to power the camera or which section to power, column 13, lines 22-56, depending on the angle a camera is turned on).

Consider **claim 15**, Shibata et al. further teach:

The apparatus according to claim 1, wherein the display unit comprises:

a viewfinder (panel monitor 21) provided in the body to show images photographed by the camera sections; and

a display panel (panel monitor 21) installed to have at least two-axis rotations (figures 1-5), wherein the display panel shows images independently of the viewfinder (images can be viewed while capturing or while reviewing which are considered independent, see also column11, lines 15-24).

Consider **claim 19**, Shibata et al. further teach:

The apparatus according to claim 8, further comprising:

However, Shibata et al. do not explicitly teach the use of a flash that can pop in and out of the housing.

Official Notice is taken that pop up flashes have been widely used to illuminate the field of capture. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a pop up flash on the device found in Shibata et al. in order to provide a flash that can move out of the axis of the optical taking lens in order to remove red-eye.

Consider **claim 23**, Shibata et al. further teach:

The apparatus according to claim 8, wherein at least one end of the housing is formed in a convexly curved shape (see figure 5, the top of the housing is convexly shaped).

Consider **claim 24**, Shibata et al. further teach:

The apparatus according to claim 8, wherein a corresponding surface of the body facing the camera unit in the OFF state among the camera sections is formed in a concavely curved shape (figure 5 demonstrates the off state with the concavely shaped edge at the top).

11. **Claims 17, 22, and 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al.

Consider **claim 17**, Nakamura et al. explicitly teach the apparatus according to claim 4 including a second CCD for the digital video camera, which converts at least one moving image picked up by a lens into electric signals (D2, figure 1).

However Nakamura et al. do not explicitly teach the use of a second lens and second driver.

Official Notice is taken that a second lens with second driver has been widely used to operate along with a second CCD. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the second lens with second driver in the image capturing apparatus of Nakamura et al. in order to have more precise control and accuracy when setting parameters of capture in a video mode.

Consider **claim 22**, Nakamura et al. explicitly teach the apparatus according to claim 21, including a flash memory mount section.

However Nakamura et al. do not explicitly teach the use of a confirming window to confirm if the memory is mounted.

Official Notice is taken that confirming windows have been widely used to determine whether a memory card is mounted on the camera. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a confirming window in the memory mount section found in Nakamura et al. in order to provide a simple method of assuring the user that the images that are captured will be saved on the card.

Consider **claim 25**, Nakamura et al. explicitly teach the apparatus according to claim 1 including a flash unit (paragraph [0065])

However, Nakamura et al. do not explicitly teach that the flash is removably installed.

Official Notice is taken that removable flashes have been widely used to illuminate the field of capture. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a removable flash on the device found in Nakamura et al. in order to provide a flash that can be mounted out of the axis of the optical taking lens in order to remove red-eye.

12. **Claims 26-31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. in view of Kuroki et al. (US 6,115,069).

Consider **claim 26**, Nakamura et al. explicitly teach the apparatus according to claim 1.

However Nakamura et al. do not explicitly teach the structure including a main body provided with a moving deck where the tape is installed and a sub body extended to the side of the main body and faced to an end of the camera.

In the same field of endeavor, Kuroki et al. teach a video camera with an electronic monitor and a cassette holder (figure 1). Kuroki et al. further teach a camera body 3, a cassette holder 4 mounted on the main body, and an electronic monitor 1 that extends from the side of the main body (column 2 lines 49-60, figures 1-3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the structure found in Kuroki et al. into the apparatus found in Nakamura et al. in order to provide a structure that enables the video camera to have a cassette holder that does not interfere with the monitor and does not enlarge the size of the camera (column 1, lines 66-67 through column 2, lines 1-2, Kuroki et al.)

Consider **claim 27**, the combination of Nakamura et al. in view of Kuroki et al. further teaches:

The apparatus according to claim 26, wherein the display unit comprises:

a viewfinder provided in the main-body (a viewfinder can be seen on the video camera body 3 in figures 1 and 2, Kuroki et al.);

a display panel (electronic monitor 1) installed in the sub-body having at least one axis rotation and driven independently of the viewfinder (figures 1-3 show the multiple axis rotation found in Kuroki et al.).

Consider **claim 28**, the combination of Nakamura et al. in view of Kuroki et al. further teaches:

The apparatus according to claim 27, wherein the sub-body is provided with a panel seat recess within which the display panel is received and seated (figures 1-3 show the electronic monitor 1 which has the display panel installed in a recess of the electronic monitor 1, Kuroki et al.).

Consider **claim 29**, the combination of Nakamura et al. in view of Kuroki et al. teaches the apparatus of claim 28.

However, the combination does not teach a signal contact terminal for signal connection with an external machine on the sub body.

Official notice is taken that signal contact terminals have been widely used to provide connection with an external machine. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a connection terminal on the apparatus found in the combination of Nakamura et al. in view of Kuroki et al. in order to increase the configurability of different systems.

Consider **claim 30**, the combination of the combination of Nakamura et al. in view of Kuroki et al. teaches the apparatus of claim 28.

However, the combination does not teach a speaker unit is provided on the sub body.

Official notice is taken that a speaker has been widely used on a camera sub body. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a speaker on the sub body of the apparatus found in the combination of Nakamura et al. in view of Kuroki et al. in order to playback sound recorded by the video camera (see Shibata et al., column 13 lines 1-4).

Consider **claim 31**, the combination of Nakamura et al. in view of Kuroki et al. further teaches:

The apparatus according to claim 26, wherein opposite ends of the camera unit are formed in a curved shape (figures 1-3 Kuroki et al.), and the sub-body is provided with a curved surface curved in a shape to correspond to the curved shape of the opposite ends (see electronic monitor 1, the ends have the same corresponding curved shape as the video camera body 1, figures 1-3).

13. **Claims 10, 34-38, and 41** are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata et al. in view of Miyake et al. (US 5,630,193).

Consider **claim 10**, Shibata et al. teach the apparatus according to claim 8.

However, Shibata et al. do not explicitly teach a battery mount section provided in the housing to removable mount the battery.

In the same field of endeavor Miyake et al. teach a power supply system for an electronic instrument (figure 1). Miyake et al. further disclose a receiving wall 19 to be fitted on the outer wall of the battery pack 11 (column 4, lines 10-12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the receiving wall with mountable battery found in Miyake et al. into the main unit 10 found in Shibata et al. in order to reduce the size of the power source that is designed as well as prevent the terminals from being damaged (column 2, lines 17-24, Miyake et al.).

Consider **claim 34**, the combination of Shibata et al. in view of Miyake et al. further teaches:

The apparatus according to claim 10, wherein the battery mount section is concavely formed on an external surface of the housing and the battery is directly received and seated in the battery mount section (figure 2 shows the concave shaped edges of the battery pack 11, which can be mounted on the receiving wall 21, Miyake et al.).

Consider **claim 35**, the combination of Shibata et al. in view of Miyake et al. further teaches:

The apparatus according to claim 10, further comprising:

a locking release unit (auxiliary hook 38) to release a locking of the battery mounted in the battery mount section (column 5, lines 17-20); and a detaching unit (terminal cover 60) to detach the battery from the battery mount section by forcibly pushing out the released battery (column 6, lines 54-62, Miyake et al.).

Consider **claim 36**, the combination of Shibata et al. in view of Miyake et al. further teaches:

The apparatus according to claim 35, wherein the detaching unit comprises:

a pushing projection installed in the bottom of the battery mount section to pop in and out (terminal cover 60); and

a spring (spring 80, Miyake et al.) to elastically and outwardly compress the pushing projection.

Consider **claim 37**, the combination of Shibata et al. in view of Miyake et al. further teaches:

The apparatus according to claim 35, wherein the bottom of the battery section is provided with a pair of power terminals electrically connected to the battery (terminals 25 and 26, Miyake et al.).

Consider **claim 38**, the combination of Shibata et al. in view of Miyake et al. further teaches:

The apparatus according to claim 37, wherein the locking release section (auxiliary hook 38) and the power terminals (terminals 25 and 26) are spaced from each other in opposite directions in the battery mount section (figure 2 shows the hook and the terminals on opposite sides).

Consider **claim 41**, the combination of Shibata et al. in view of Miyake et al. further teaches:

The apparatus according to claim 10, wherein the battery mount section has at least one concavely curved surface having a radius of curvature (see figure 1 battery cover has a concave shaped edge, which is considered to have a radius of curvature).

Allowable Subject Matter

14. Claims 5-7, 9, 32, 33, 39, 40, 42-50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Egan whose telephone number is (571) 270-1452. The examiner can normally be reached on Monday-Friday 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc-Yen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SE

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SUPERVISORY PATENT EXAMINER